Introduction to CSREES and Integrated Programs

Integrated Programs

Grantsmanship Workshop

Feb 8-9

C S R E E S

C o o p e r a t i v e

S t a t e

R e s e a r c h

E d u c a t i o n

E x t e n s i o n

S e r v i c e

OUR MISSION

To advance knowledge for agriculture, the environment, human health and well-being, and communities.

CSREES INTEGRATED PROGRAMS

C S R E E S
Portfolio of Funding Mechanisms

Formula Funding

Congressional Line Items

Competitive Programs

C S R E E S
INTEGRATED
PROGRAMS

Integrated Research, Education, and Extension

Integrated

Research

Education

Extension

To bring the three components of the agricultural knowledge system (research, extension, and education) around a problem area or issue

CSREES INTEGRATED PROGRAMS

RESEARCH

Integrated

Research

Education

Extension

Scientific investigation or inquiry which results in the generation of knowledge

CSREES INTEGRATED PROGRAMS

EDUCATION

Integrated

Research

Education

Extension

Formal classroom instruction, laboratory instruction, and practicum experience in food and agricultural sciences and other related matters such as faculty development, student recruitment and services, curriculum development, instructional materials and equipment, and innovative teaching methodologies

CSREES INTEGRATED PROGRAMS

EXTENSION

Integrated

Research

Education

Extension

A series of educational activities with identified learning objectives that deliver science-based knowledge to people outside of the traditional classroom, enabling them to make practical decisions

CSREES INTEGRATED PROGRAMS

Integrated Research, Education, and Extension

What does optimal integration look like?

Research, extension, and education components complement one another and are truly necessary for the ultimate success of the project

CSREES INTEGRATED PROGRAMS

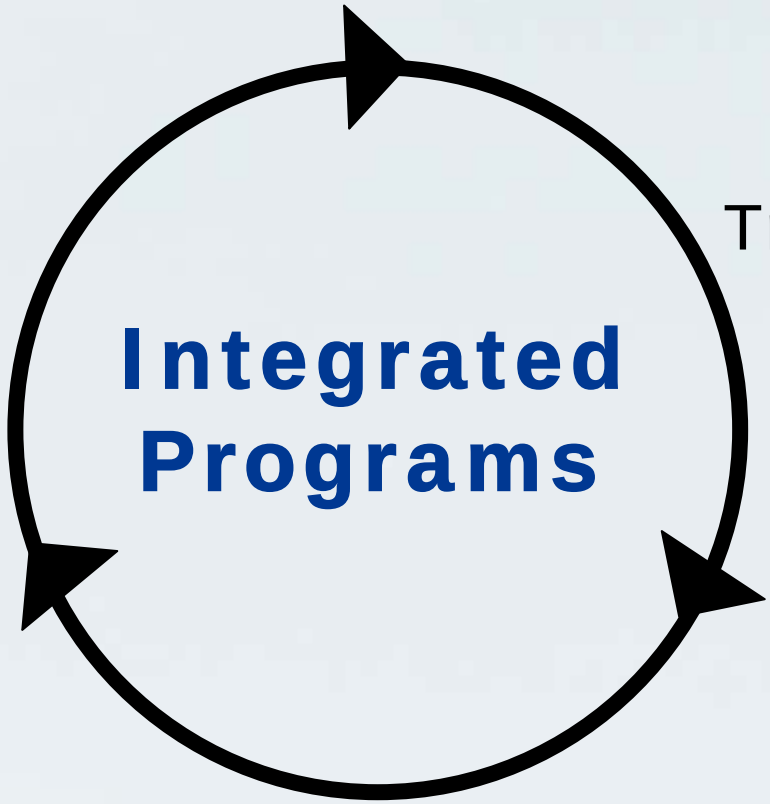
Knowledge Continuum for Research, Education, and Extension

Research

Creation of knowledge

Education

Training the next generation



Extension

Dissemination of knowledge for decision-making

CSREES INTEGRATED PROGRAMS

CSREES Integrated Programs

Section 406 Integrated, Research, Education, and Extension Program

- National Integrated Food Safety Initiative
- National Integrated Water Quality Program
- Integrated Pest Management Programs

CAR, RAMP, IPM Centers

- Methyl Bromide Transitions

CSREES Integrated Programs

Pest Management Alternatives Program

Integrated Organic Program

National Research Initiative Integrated Programs

–15 program areas will support integrated projects in FY 2006

Integrated Research Education, and Extension Program (Section 406)

Integrated Programs

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Integrated Research, Education, and Extension

SECTION 406

Authorized in Section 406 of the Agricultural Research, Extension and Education Reform Act of 1998 (AREERA).

Provides funding for integrated, multifunctional agricultural research, extension, and education activities.

Program Characteristics

SECTION 406

Eligible Institutions

- Accredited colleges and universities that grant a bachelor's degree or any other higher degree

  Also 1994 institutions (2002 Farm Bill)

  Matching if commodity specific

  Indirect costs capped at 20%

Appropriations

SECTION 406

2000	$39.54 M
2001	41.85 M
2002	42.85 M
2003	44.23 M
2004	39.55 M
2005	43.06 M
2006	42.30 M

CSREES INTEGRATED PROGRAMS

National Integrated Food Safety Initiative

SECTION 406

Supports projects on priority issues in food safety that are best solved using an integrated approach

Priorities address a broad spectrum of concerns ranging from on-farm production, post-harvest processing and distribution, to food selection, preparation and consumption

$14.7 M for FY 2006

Contact: Dr. Jan Singleton

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CSREES INTEGRATED PROGRAMS

National Integrated Water Quality Program

SECTION 406

Support research, extension and education activities that address U.S. water quality priorities

Targeted to the identification and resolution of agriculturally-related degradation of water quality

$12.7 M for FY 2006

Contact: Dr. Mike O'Neill

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CSREES INTEGRATED PROGRAMS

Integrated Pest Management: Crops at Risk

SECTION 406

Enhance the development and implementation of innovative, ecologically-based IPM systems focused on a specific food or fiber commodity in commercial production

$1.4 M for FY 2006

Contact: Dr. H.J. (Rick) Meyer
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CSREES INTEGRATED PROGRAMS

Integrated Pest Management: Risk Avoidance & Mitigation

SECTION 406

Enhance the development and implementation of innovative IPM strategies for multi-crop food and fiber production systems, or for production systems on an area-wide or landscape scale

$4.4 M for FY 2006

Contact: Dr. Robert Nowierski
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CSREES INTEGRATED PROGRAMS

Integrated Pest Management: Regional Pest Management Centers

SECTION 406

To bring together expertise, identify needs and priorities and address a broad range of IPM issues focused at the regional level

Next competition in FY 2007

Contact: Dr. Mike Fitzner

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CSREES INTEGRATED PROGRAMS

Pest Management Alternatives Program

SECTION 406

Develop and implement IPM practices, tactics and systems for specific pest problems while reducing human and environmental risks

$1.4 M for FY 2006

Contact: Dr. Monte Johnson
mpjohnson@csrees.usda.gov

CSREES INTEGRATED PROGRAMS

Methyl Bromide Transitions

Support the discovery and implementation of practical IPM alternatives for managing soil borne pathogens and weeds, post-harvest pests, or storage and packing material sanitation

$3.1 M for FY 2006

Contact: Dr. James Green

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CSREES INTEGRATED PROGRAMS

Integrated Organic Program

SECTION 406

Addresses critical organic agriculture issues through the integration of research, education, and extension activities in support of organic producers and those adopting organic practices

$4.7 M for FY 2006

Contact: Dr. Tom Bewick

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CSREES INTEGRATED PROGRAMS

NATIONAL RESEARCH INITIATIVE

Integrated Programs

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National Research Initiative

High priority research and integrated activities in agriculture, the environment, human health and well-being, and rural communities

CSREES INTEGRATED PROGRAMS

National Research Initiative

Fundamental and Mission-linked Research - *(Basic and Applied)*

Integrated Activities

(Research, Extension, and/or Education)

Single discipline or Multi-disciplinary

Individual Investigator or Teams of Investigators

CSREES INTEGRATED PROGRAMS

Congressional Appropriations for the NRI 1991 to 2006

CSREES INTEGRATED PROGRAMS

National Research Initiative

Since 2003, the NRI makes awards under two legal authorities

- **Research**
- **Integrated**

Integrated authority provided through annual appropriations bill (up to 22% of funds in FY 2006)

National Research Initiative

Differences between Research and Integrated program elements

- Eligibility based on legal authorities
- Proposal (and award) types
- Award size
- “Strengthening” mechanism

NRI Integrated Eligibility

Federal research agencies, national laboratories, colleges or universities, private research organizations, and state agricultural experiment stations

Indirect costs capped at 20%

Matching required only when commodity specific

NRI Integrated Projects

- One proposal type: Integrated Project Proposals
- Two award types: Integrated Project grants and Bridge grants
- Research, extension, and/or education (at least two functions required)
- Award size depends on program

NRI Integrated Bridge Grants

- To assist small, mid-sized, and minority-serving* institutions
- **One-time infusion of up to $100K**
- May not apply directly for bridge grants

* Enrollment of one or more minority groups exceeds 50% of total

CSREES INTEGRATED PROGRAMS

Coordinated Agricultural Project (CAP)

- Designed to target specific gaps or make rapid progress on high priority areas
- Large Awards- $3 million plus
- May be research or integrated depending on need
- Significant % of flexible funding

CSREES INTEGRATED PROGRAMS

National Research Initiative

FY 2006 RFA

Organized into program clusters

Greater focus in program priorities

Greater clarity in requests for research vs. integrated projects

National Research Initiative

FY 2006 RFA

- 15 programs offering integrated priorities
- Letters of Intent required in some cases

National Research Initiative

NRI Program Clusters

- Agricultural Genomics
- Agricultural Biosecurity
- Agricultural Production and Value-Added Processing
- Nutrition, Obesity, Food Safety and Quality
- Agroecosystems

Agricultural Genomics Cluster

NRI Integrated FY 2006

Example: Animal Genome Program ($1.5 M)

Priority for Integrated Activities:

- Manipulation and management of the animal's genome through the use of molecular markers, including quantitative-trait loci, economic trait loci, and SNP of importance for animals of agricultural importance to improve animal health, product quality and/or production efficiency

CSREES INTEGRATED PROGRAMS

Agricultural Biosecurity Cluster ($9.8M)

NRI Integrated FY 2006

Program Areas:

- Animal Biosecurity (Peter Johnson)
- Animal Protection: Animal Well-Being (Peter Brayton)
- Plant Biosecurity (Liang Lin and John Sherwood)

CSREES INTEGRATED PROGRAMS

Agricultural Biosecurity Cluster ($9.8M)

NRI Integrated FY 2006

Example: Plant Biosecurity Program

Priority for Integrated Activities:

- Early detection, diagnosis, and monitoring tools for species of *Phytophthora, Ralstonia*, or *Xylella*, for which whole genome sequences are available

CSREES INTEGRATED PROGRAMS

Agricultural Production and Value-Added Processing Cluster ($5.5 M)

NRI Integrated FY 2006

Program Areas:

- Animal Reproduction (Mark Mirando)
- Animal Growth and Nutrient Utilization (Mark Mirando)
- Agricultural Plants and Environmental Adaptation (Gail McLean)

CSREES INTEGRATED PROGRAMS

Agricultural Production and Value-Added Processing Cluster ($5.5 M)

NRI Integrated FY 2006

Program Areas:

- Genetic Processes and Mechanisms of Agricultural Plants (Liang Lin)
- Improving Food Quality and Value (Ram Rao and Hongda Chen)

CSREES INTEGRATED PROGRAMS

Agricultural Production and Value-Added Processing Cluster ($5.5 M)

NRI Integrated FY 2006

Example: Animal Reproduction Program

Priority for Integrated Activities:

- Regulation of fertility through manipulation or management of gonadal function, the hypothalamic-pituitary axis, and or embryonic and fetal development

CSREES INTEGRATED PROGRAMS

Nutrition, Obesity, Food Safety and Quality Cluster- ($11.0 M)

NRI Integrated FY 2006

Program Areas:

- Human Nutrition and Obesity (Etta Saltos and Susan Welsh)
- Epidemiological Approaches for Food Safety (Mary Torrance)

CSREES INTEGRATED PROGRAMS

Nutrition, Obesity, Food Safety and Quality Cluster- ($11.0 M)

NRI Integrated FY 2006

Example: Human Nutrition and Obesity Program

Priorities for Integrated Activities:

- Improve our understanding of the behavioral and environmental factors that influence obesity
- Develop behavioral and environmental instruments for measuring progress in obesity prevention; and
- Develop effective intervention strategies for preventing obesity

CSREES INTEGRATED PROGRAMS

Agro-Ecosystems Cluster
(10.6 M)

NRI Integrated
FY 2006

Program Areas:

- Air Quality (Ray Knighton)
- Managed Ecosystems (Diana Jerkins)
- Biology of Weedy and Invasive Species in Agroecosystems (Michael Bowers)
- Agricultural Prosperity for Small and Mid-sized Farms (S. Sureshwaran and Diana Jerkins)

CSREES
INTEGRATED
PROGRAMS

Agro-Ecosystems Cluster
(10.6 M)

NRI Integrated
FY 2006

Example: Managed Ecosystems Program

Priority for Integrated Activities:

- Agroecosystem-based management strategies, with emphasis on information dissemination and training on management models, as well as development of curricula on systems research procedures and/or ecological systems functions

CSREES
INTEGRATED
PROGRAMS

Integrated

Programs

Solve

Today's

Problems